

REMARKS

The Examiner's comments from the Office Action mailed November 26, 2007 have been carefully considered. Claims 23-29 remain pending in the application. Claims 8-22 remain withdrawn. No claims have been amended and no new matter has been added.

Reexamination and allowance of the pending claims are respectfully requested. Applicant asserts no additional search or examination is necessitated by the arguments. No substantial amount of additional work is required on the part of the Patent Office or the Examiner.

Claim Rejections

Claims 23-26, 28, and 29 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,338,198 to Wu et al. (hereinafter "Wu") in view of U.S. Publication No. 2004/0017369 to Hultgren et al. (hereinafter "Hultgren"). Applicant respectfully traverses the rejection.

Claim 23 recites, in part, two scanning apparatus for positioning physical objects within a scanning device when generating an electronic model corresponding to each of the physical objects, each scanning apparatus including a plurality of alignment spheres.

Neither Wu nor Hultgren disclose or suggest this recited invention.

Rather, the alignment markers in Wu are included on a separate alignment device, not the scanning apparatus from which the electronic models are generated. More specifically, Wu discloses scanning a full impression of a dental arch, from which electronic models are generated, using a tray 10. No markers are provided on the tray 10 and Wu does not disclose or suggest using alignment markers when scanning the full impression. Instead, after scanning the full impression, Wu scans partial impressions for alignment purposes using a separate alignment tray 30 or holding jig 40. "[T]his information is used to compare the full impressions *previously taken* so that the maxillary and mandibular dental arch can be aligned from the partial impression data." See *Wu*, column 10, lines 8-12.

Hultgren does not overcome the shortcomings of Wu. Hultgren also does not disclose or suggest scanning apparatus including a plurality of alignment spheres. Furthermore, no reason is provided in Wu, Hultgren, or elsewhere to modify the scanning apparatus tray 10 of Wu to include alignment markers.

For at least these reasons, Wu would not lead a person skilled in the art to the invention of claim 23, even in view of Hultgren. Claims 24-26 depend from claim 23 and are allowable for at least the same reasons. Withdrawal of the rejection and allowance of claims 23-26 are respectfully requested. Applicant does not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

Claim 28 recites, in part, positioning each of scanning apparatus into a desired position in which the physical models are positioned relative to each other as the objects corresponding to the physical models interact with each other to generate a composite scanning apparatus.

None of the cited references disclose or suggest this recited invention.

Neither the holder 12 nor the alignment tray 30 of Wu position scanning apparatus so that the physical models are positioned relative to each other as the objects (i.e., teeth) corresponding to the physical models interact with each other. Rather, the holder 12 in Wu holds a dental arch impression for scanning on an X-Y table. See *Wu*, FIGS. 1-2 and column 5, lines 25-50. Wu does not even disclose the holder 12 holding more than a single dental arch impression at one time. The alignment tray 30 holds partial dental impressions on opposite sides of the same surface. See *Wu*, FIG. 4 and column 9, line 66 through column 10, line 12. Accordingly, the partial dental impressions face away from each other. In contrast, teeth to which the partial dental impressions correspond do not interact by facing away from each other.

Hultgren does not overcome the shortcomings of Wu. Hultgren also does not disclose or suggest positioning each of scanning apparatus into a desired position in which the physical models are positioned relative to each other as the objects corresponding to the physical models interact with each other. Furthermore, no reasons is provided in Hultgren, Wu, or elsewhere to modify Wu to position the impressions relative to each other as the objects corresponding to the physical models (i.e., teeth) interact with each other.

For at least these reasons, Wu would not lead a person skilled in the art to the invention of claim 28, even in view of Hultgren. Claim 29 depends from claim 28 and is allowable for at least the same reasons. Withdrawal of the rejection and allowance of claims 28 and 29 are respectfully requested. Applicant does not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

Claim 27 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Hultgren, and further in view of U.S. Publication No. 2005/0250075 to Taub et al. (hereinafter "Taub"). Applicant respectfully traverses the rejection.

Claim 27 depends from claim 23 and is allowable over the combination of Wu and Hultgren for at least the same reasons as discussed above with respect to claim 23. Taub does not overcome the shortcomings of Wu and Hultgren. Taub also fails to disclose or suggest two scanning apparatus for positioning physical objects within a scanning device when generating an electronic model corresponding to each of the physical objects, each scanning apparatus including a plurality of alignment spheres. Rather, Taub discloses forming physical objects from electronic models. The electronic models are generated using negative teeth models. Taub does not disclose or suggest the negative teeth models include alignment spheres. No reason is provided in Taub or elsewhere to modify the negative teeth models in Taub to include alignment spheres.

For at least these reasons, Wu would not lead a person skilled in the art to the invention of claim 1, even in view of Hultgren and Taub. Withdrawal of the rejection and allowance of claim 27 are respectfully requested. Applicant does not otherwise concede the correctness of the rejection and reserve the right to make additional arguments if necessary.

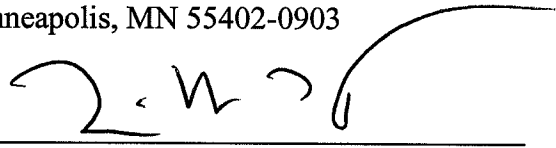
Conclusion

Applicant requests reconsideration and allowance of the application in view of the above amendments. If a phone conference would be helpful in resolving any issues related to this matter, please contact Applicant's attorney below at 612.336.4755.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

Dated: 26 February 2008



Brian H. Batzli
Reg. No. 32,960
BHB/JKS:rlk

23552

PATENT TRADEMARK OFFICE